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January, 1922

GIPSY AND BROWN-TAIL MOTH INVESTIGATIONS

A. F. Burgess, Entomologist in Charge

At the end of January, 1922, S. S. Crossman and Dr. John N. Summers, who have been associated with this branch for several years, will leave this country to take up parasite work in Europe and Japan respectively, in continuation of work along this line which was interrupted by war conditions.

Prior to the war, parasites from abroad were received in this country and were propagated and disseminated throughout the area infested with the gipsy and brown-tail moths. Many of the species imported were successfully established and it was purposed to continue the work of importing, studying, and colonizing in the field all species of parasites which were found to aid in the control of the two pests in their native homes.

The outbreak of the world war prevented a continuation of this effort. It is believed that much benefit will be derived from further work abroad in importing beneficial parasites to aid in control in this country. A number of species which were imported prior to the interruption of this work did not become established for various reasons, some of which are not well understood at this time. It seems certain that some of these species may be established if study is continued and earnest effort made through foreign work by scientists experienced in moth investigations in this country.

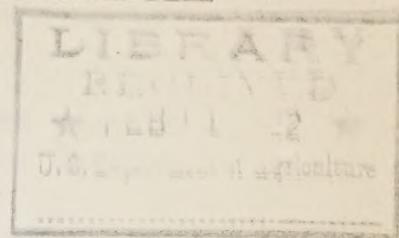
Mr. Crossman will visit Portugal, Spain, Italy, Austria, Czechoslovakia, France, and Germany in an endeavor to supplement the information which we now have regarding the gipsy and brown-tail moths in their native homes, as well as the parasites which attack them.

Dr. Summers will visit the localities in Japan which promise the greatest results.

CEREAL AND FORAGE INSECT INVESTIGATIONS

W. R. Walton, Entomologist in Charge

Harry L. Parker, attached to the corn-borer investigations, formerly located at Arlington, Mass., sailed for France on January 17 for the purpose of assisting W. R. Thompson in the collection and shipment of parasites of the corn borer from France to the United States. Mr. Parker's address will be: European Parasite Laboratory, Domaine du Mont Fenouillet, Hyeres, Var, France.





George I. Reeves, in charge of the alfalfa weevil investigations, visited Washington during the month of December for the purpose of consultation and preparation of manuscript. Mr. Reeves returned to Salt Lake City shortly before the holidays.

J. R. Horton, George G. Ainslie, and W. B. Cartwright visited the Washington office during early January subsequent to the Hessian fly conference held at Carlisle, Penn.

L. P. Rockwood, in charge of the laboratory at Forest Grove, Oreg., arrived in Washington about the middle of December for the purpose of preparing a manuscript on the clover root-borer and for consultation with the Chief of the Bureau. During his stay, Mr. Rockwood attended the Hessian fly conference at Carlisle, Penn., returning to Forest Grove about January 20.

The annual conference of Hessian fly workers of the branch of Cereal and Forage Insect Investigations was held at Carlisle, Penn., on January 2. The following persons were in attendance: W. R. Walton and Joe S. Wade, Washington, D. C.; W. H. Larrimer and W. B. Cartwright, West Lafayette, Ind.; J. R. Horton, Wichita, Kans.; A. F. Satterthwait, Webster Groves, Mo.; G. G. Ainslie, Knoxville, Tenn.; W. J. Phillips, Charlottesville, Va.; L. P. Rockwood, Forest Grove, Oreg.; and P. R. Myers, C. C. Hill, and H. D. Smith, Carlisle, Penn. It was the unanimous opinion of those present that the conference had attained valuable results and that similar conferences should be held annually in the future.

K. W. Babcock of the Arlington laboratory visited Washington during the week of January 16-21, in connection with his ecological studies of the corn borer. While in Washington, Mr. Babcock consulted with various specialists of the Department regarding several phases of this work, and was able to secure especially valuable information from the research workers of the Weather Bureau.

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#### SOUTHERN FIELD CROP INSECT INVESTIGATIONS

J. L. Webb, Entomologist Acting in Charge

F. C. Bishop of the Dallas, Tex., laboratory, following attendance at the Toronto meeting, visited several points in New York in connection with the ox-warble work being done in that State. Coming on to Washington he spent a few days conferring with various Department officials on phases of the work on investigations of insects injurious to animals. He then returned to Dallas, making a few stops en route to investigate ox-warble conditions.

Geo. A. Maloney of the Boll Weevil Laboratory delivered an address on boll weevil control before the Rhode Island Textile Manufacturers at Providence, on January 21.

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and the other two were in the same condition as the first.  
The last was a small, thin, dark brown bird, with a long, slender, slightly upturned bill.

A new motion picture film showing details of the methods of controlling the boll weevil by dusting with calcium arsenate has recently been completed and will be released shortly.

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#### BEE CULTURE

E. F. Phillips, Apiculturist in Charge

Dr. E. F. Phillips spoke on beekeeping at the Madison Square Garden Poultry Show, New York City, on January 26.

Geo. H. Rea, formerly extension specialist in beekeeping in New York, has resigned to take up similar work at Pennsylvania State College.

The American Honey Producers' League held its annual meeting at Salt Lake City, January 30 and 31.

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#### FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, Entomologist in Charge

Dr. A. L. Quaintance has returned from a trip to New Orleans, La., and Bentonville, Ark., where he conferred with men in charge of the Bureau's laboratories at these places regarding work under way.

B. A. Porter, who is in charge of the Bureau's laboratory at Wallingford, Conn., is temporarily in Washington preparing reports on the subject of his field investigations.

C. A. Weigel, in charge of greenhouse insect investigations, is at present in New Orleans, La., assisting in camphor scale work.

C. F. Doucette, who has been in Washington temporarily, has returned to his permanent headquarters at Doylestown, Penn., where he will resume his investigations of greenhouse insects.

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to be present over the entire area. It is also interesting to note that the  
percentage of the alluvium which was derived from the bedrock area  
and therefore contains little material of igneous rock and gneissic  
rocks decreased as the basin became more glaciogenic.

#### CHAPTER VIII.

THE ALLUVIUM OF THE RIVER GUNNISON.

The alluvium of the river Gunnison is derived from the bedrock areas  
of the Colorado Plateau and the Colorado Rockies. The alluvium  
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LIBRARY

Mabel Colcord, Librarian

New Books

Bondar, Gregorio. La larve de la noix des palmiers. Biologie der Bruchus nucleorum Fabr. Bicho de coco). Broteria, Serie zoologica, v. 19, fasc. 3, p. 125-135, illus. 1921.

Carpenter, G. H. The Apterygota of the Seychelles, 70 p. Dublin. (Proc. Royal Irish Academy, v. 33, Sec. B., no. 1, June, 1916.) References to literature, p. 55-58.

Carpenter, G. H. Insect transformation. 282 p, London, Methuen & Co., Ltd. 1921.

Cecconi, Giacomo. Manuale di entomologia forestale. fasc. 8 (p. 449-512). illus. Firenze, 1921.

Chopard, L. Recherches sur la conformation et le developpement des derniers segments abdominaux chez les orthopteres... 352 p., illus., 7 pl. Rennes, Imprimerie Oberthur, 1920. Bibliographie, p. 332-337.

Doflein, Franz. Mazedonische ameisen.. 74 p., illus., 8 pl. Jena, Verlag von Gustav Fischer, 1920.

Donge, Ernest.  
& Estiot, P. P. Les insectes et leurs degats. 115 p., illus., pl. Paris, 1921. (Encyclopedie pratique du naturaliste VI.)

Douglas, B. W. Every step in beekeeping. 177 p., pl. Indianapolis, 1921.

Esben-Petersen, P. Mecoptera. Monographic revision. 171 p., illus., 2 pl. Bruxelles, Hayez, Imp. des academies, 1921. (Collections zoologiques Edm. do Selys Longchamps No. 47. Mecoptera fasc. 5, pt. 2.)

Evans, A. M. On the structure and occurrence of maxillulae in the orders of insects. Jour. Linnean Soc. London. Zoology, v. 34, no. 229, p. 429-456, pl. 31, April 28, 1921. Bibliography, p. 454-456.

Ferris, G. F. Contributions toward a monograph of the sucking lice. Part II. p. 59-133, illus. (Stanford Univ. Pubs. Univ. Ser. Biol. Sci., v. 2, no. 2.)

Froggatt, W. W. A descriptive catalogue of the scale insects ("Coccidae") of Australia. Part III. 43 p., illus. Sydney, New South Wales, October, 1921. (New South Wales Dept. Agr. Science Bul. No. 19.)

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Grandi, G. Ricerche sul gen. Philotryposis Forst. (Hymenoptera-Chalcididae). 190 p., illus. Portici, Stab. Tip. Ernesto Dalla Torre, 1921. Bollettino del Lab. di zool. gen. e agr. della R. Scuola sup. d'agr. in Portici, v. 15, September 15, 1921.

Great Britain. Ministry of agriculture and fisheries. Collected leaflets on insect pests of fruit trees. 100 p., illus., pl. London, 1921. (Sectional v. 2.)

Greece - Ministere de l'agriculture. Service phytopathologique. Rapport. 48 p., 3 pl. Athens, April, 1921. Signed Constantin A. Isaakides. (Largely on Dacus oleae.)

Gunn, D. The false codling moth (Argyroploce leucotreta Mayr). 28 p., illus., pl. Pretoria, The Government Printing and Stationery Office, 1921. (South Africa Dept. Agr. Science Bul. 21.)

Hewitt, C. G. The conservation of wild life in Canada. 343 p., illus., 23 pl. New York, Charles Scribner's Sons, 1921.

Kaye, W. J. A catalogue of the Trinidad Lepidoptera Rhopalocera (Butterflies). 163 p. Trinidad, B. W. I., Printed at the Government Printing Office, December, 1921. (Memoirs of the Dept. Agr. Trinidad and Tobago, No. 2.)

Lee, A. B. The microtomist's vade-mecum, a handbook of the methods of microscopic anatomy. 8th ed. 595 p. Philadelphia, P. Blakiston's Son & Co., 1921.

Muir, F. The sugar cane leafhopper and its parasites in Hawaii. Hawaiian Planters' Record, v. 25, no. 3, p. 108-123, September, 1921. illus.

Pearce, E. K. Typical flies; a photographic atlas. 2d series. 38 p. Cambridge, University Press, 1921.

Scorer, A. G. The entomologist's log-book and dictionary of the life histories and food plants of the British Macro-lepidoptera... 374 p. London, G. Routledge & Sons, Limited, 1913.

Tinsley, Joseph, The production of honey. p. 39-56, illus., pl. Glasgow, Robert Anderson, 1919. (West of Scotland Agr. College Bul. 93.)

Tinsley, Joseph. Some bee diseases. p. 83-90. Glasgow, Robert Anderson, 1920. (West of Scotland Agr. College Bul. 96.)

